

inventronics

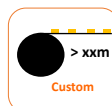
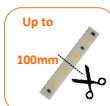
LINEARlight FLEX IP00 RGB and RGBW

RGB and RGBW IP00 LED strips for vivid colors and perfect white
LF600RGB / LF1300RGBW

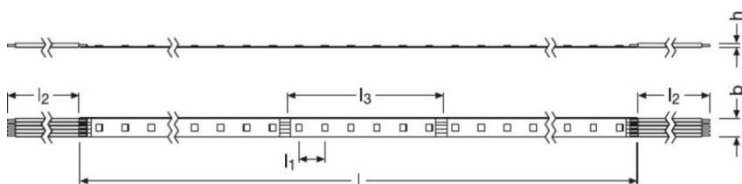


Features & Benefits

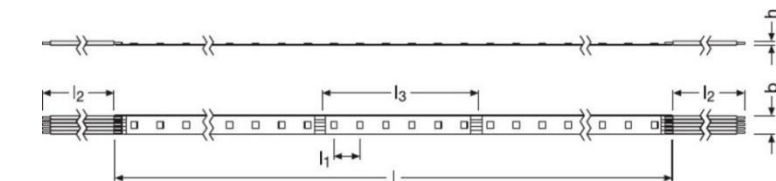
- Luminous flux up to 1243 lm/m
- Lifetime up to 60.000 h L90B10 at Tp (white chip)
- Internal constant current regulator
- Perceived color uniformity ≤ 3 SDCM*
- Full single bin on each color and white
- Vivid saturated colors and powerful pastel colors
- Enhanced special white: add a few drops of colors to white for a gentle change of CCT and ad-hoc color rendering
- Extraordinary design and high-quality materials
- Great design freedom thanks to flexibility and cuttability of the strip
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back
- Quick and safe installation thanks to factory-assembled wires on both ends, with Reel-to-Reel manufacturing process
- Dimmable by PWM technology & DALI
- Made in Italy



Technical drawings



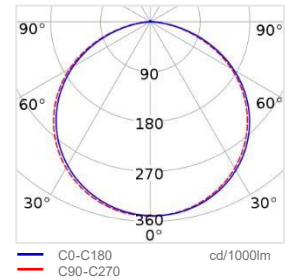
	l mm	l ₁ mm	l ₂ mm	l ₃ mm	h mm	b mm
LF600RGB	6000	20	--	100	2.2	8



	l mm	l ₁ mm	l ₂ mm	l ₃ mm	h mm	b mm
LF1300RGBW	5100	16.7	500	100	1.7	10

Lowest Bending Radius = 20 mm
Number LED/m = LF600RGB: 50; LF1300RGBW 120
Max. operable length = product length "l"

Nominal Voltage	24.0 V
Reverse voltage protection up to	25.0 V
Temperature range in operation @ Tc point	RGB: -30 ... +75°C RGBW: -20... +85°C
Storage Temperature	-40...+85 °C
Ambient Temperature with profile **	-20...+50 °C



Technical data

	Luminous Flux lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length m
LF600RGB-G5-06	574	16.4	0.685	35	45	6

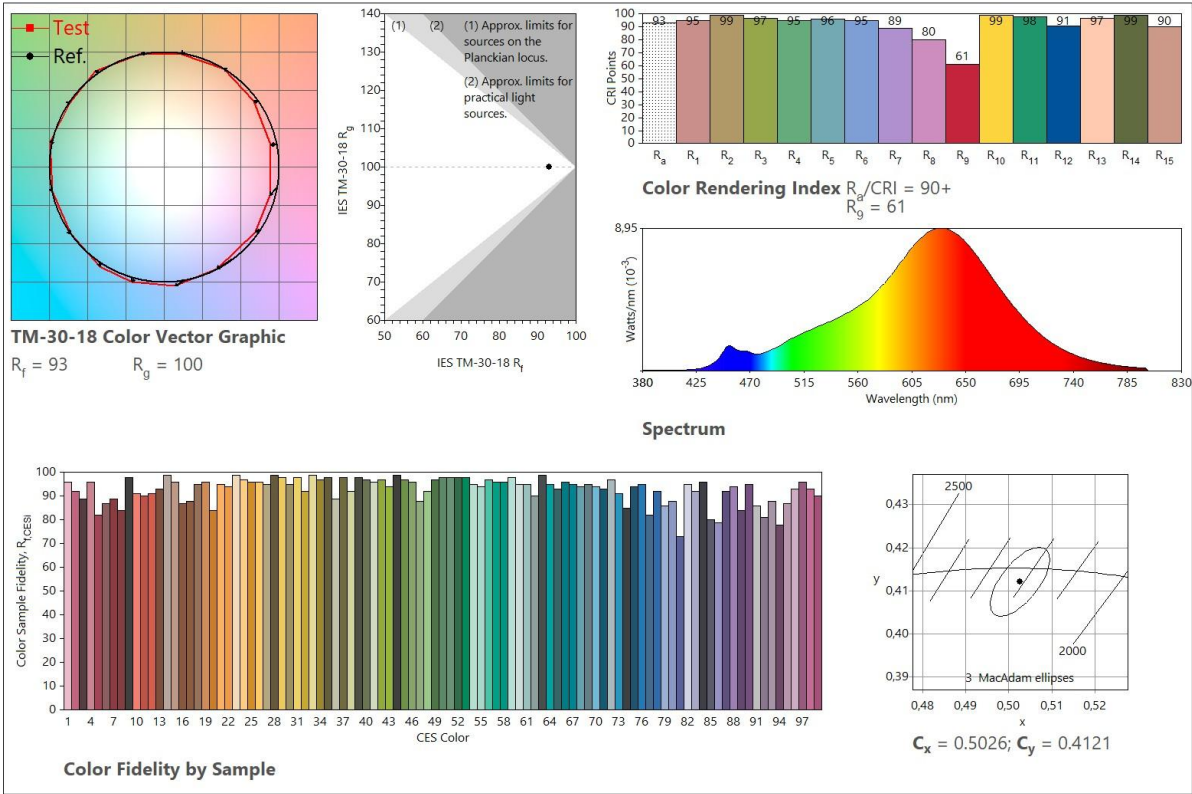
LF600RGB-G5-06	Dom. λ (nm)	Luminous Flux per meter lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length m
● R	620	190	6.6	0.275	29	30	6
● G	530	320	5	0.208	64	30	6
● B	470	64	4.8	0.200	13	30	6

LF1300RGBW	Nominal CCT (White only)	CRI	Luminous Flux lm/m	Power W/m	Current A/m	Efficacy lm/W	Performance Temp. Tp °C	Length [m]
LF1300RGBW-G1-922-05	● 2200 K	>90	1163	19.8	0.817	59	45	5.1
LF1300RGBW-G1-927-05	● 2700 K	>90	1208	18.6	0.775	65	45	5.1
LF1300RGBW-G1-930-05	● 3000 K	>90	1218	18.6	0.775	65	45	5.1
LF1300RGBW-G1-940-05	○ 4000 K	>90	1278	18.6	0.775	69	45	5.1
LF1300RGBW-G1-965-05	● 6500 K	>90	1243	18.6	0.775	67	45	5.1

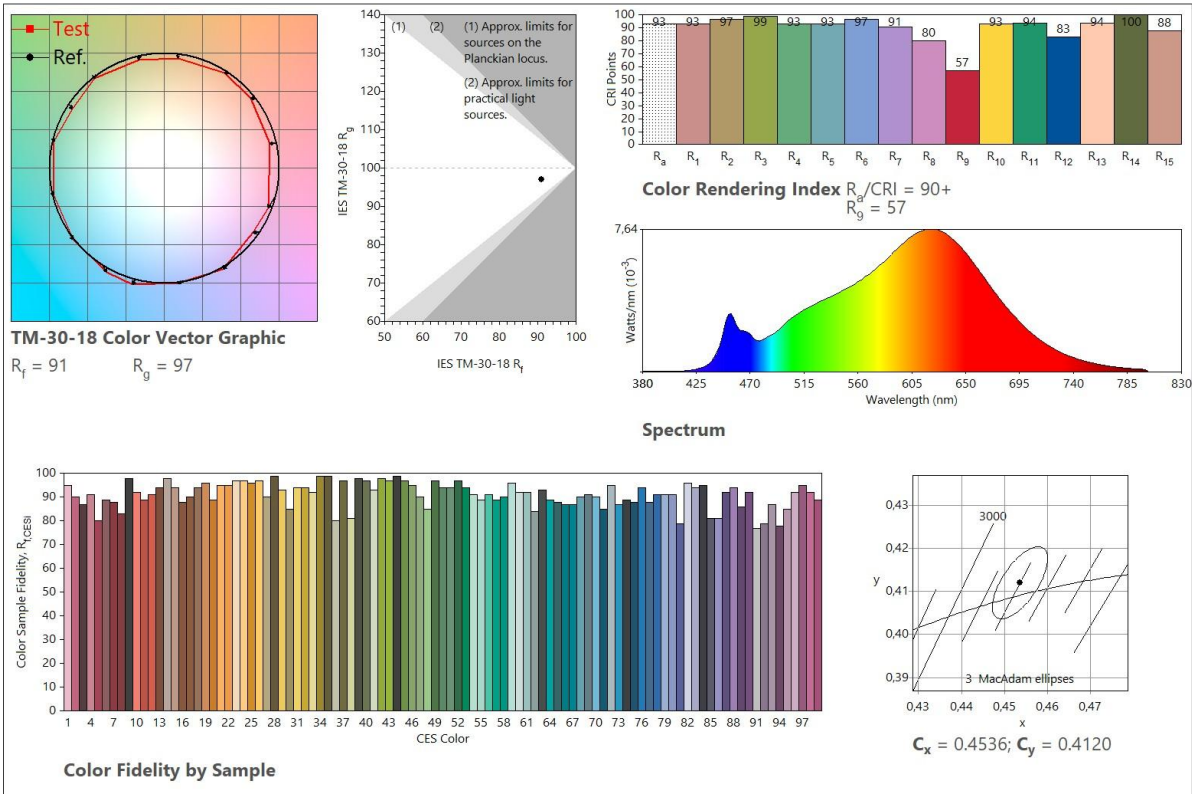
LF1300RGBW	Dom. λ (nm)	Luminous Flux per meter lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length [m]
● R	622	131.5	4.7	0.195	28	45	5.1
● G	534	328	4.6	0.192	71	45	5.1
● B	468	33	1.7	0.070	19	45	5.1
● White (922 version)	-	670	8.8	0.367	76	45	5.1
● White (927 version)	-	715	7.6	0.317	94	45	5.1
● White (930 version)	-	725	7.6	0.317	95	45	5.1
○ White (940 version)	-	785	7.6	0.317	103	45	5.1
● White (965 version)	-	750	7.6	0.317	99	45	5.1

Color output data

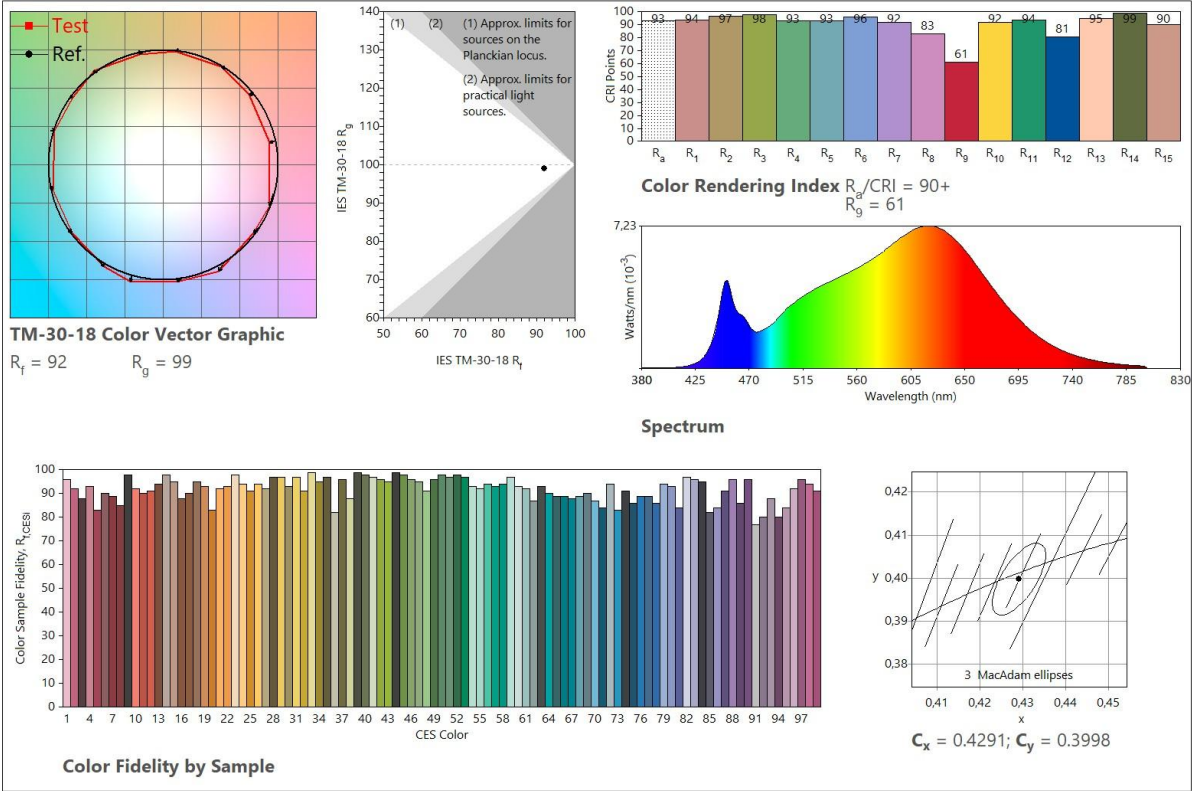
LF1300RGBW-G1-922



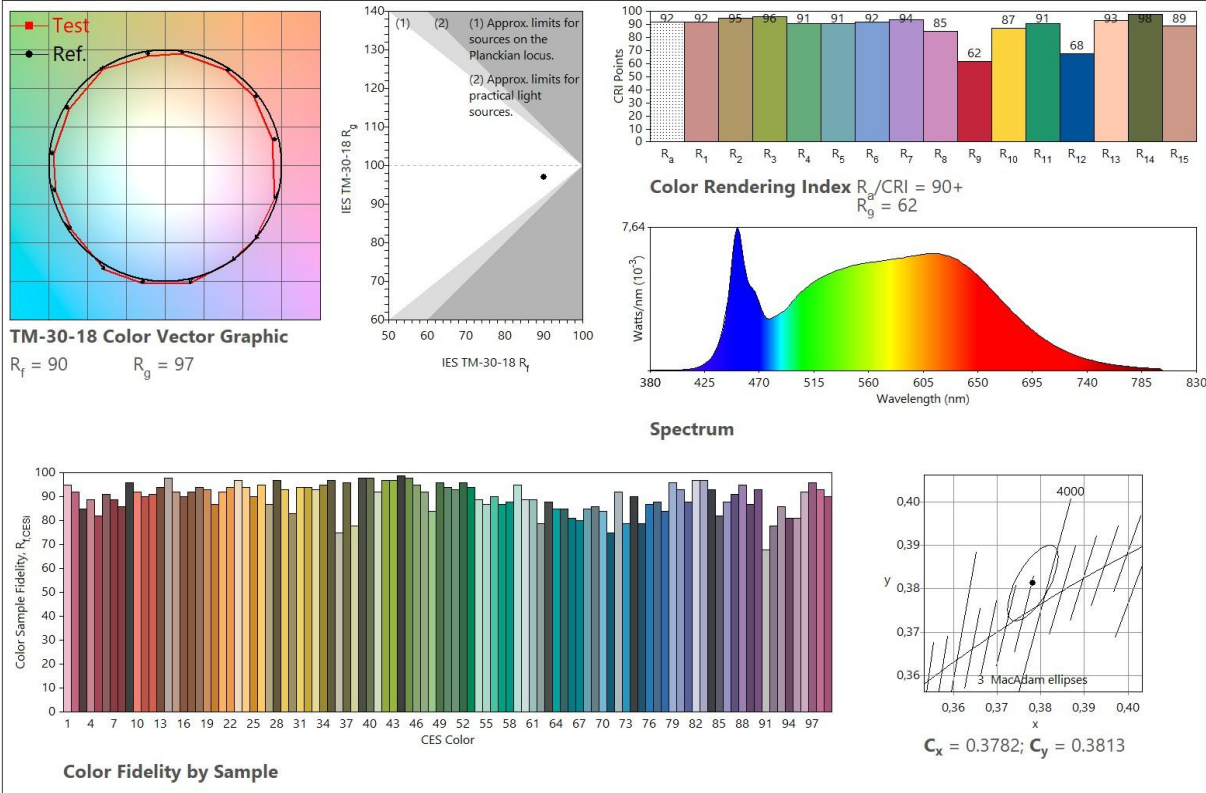
LF1300RGBW-G1-927



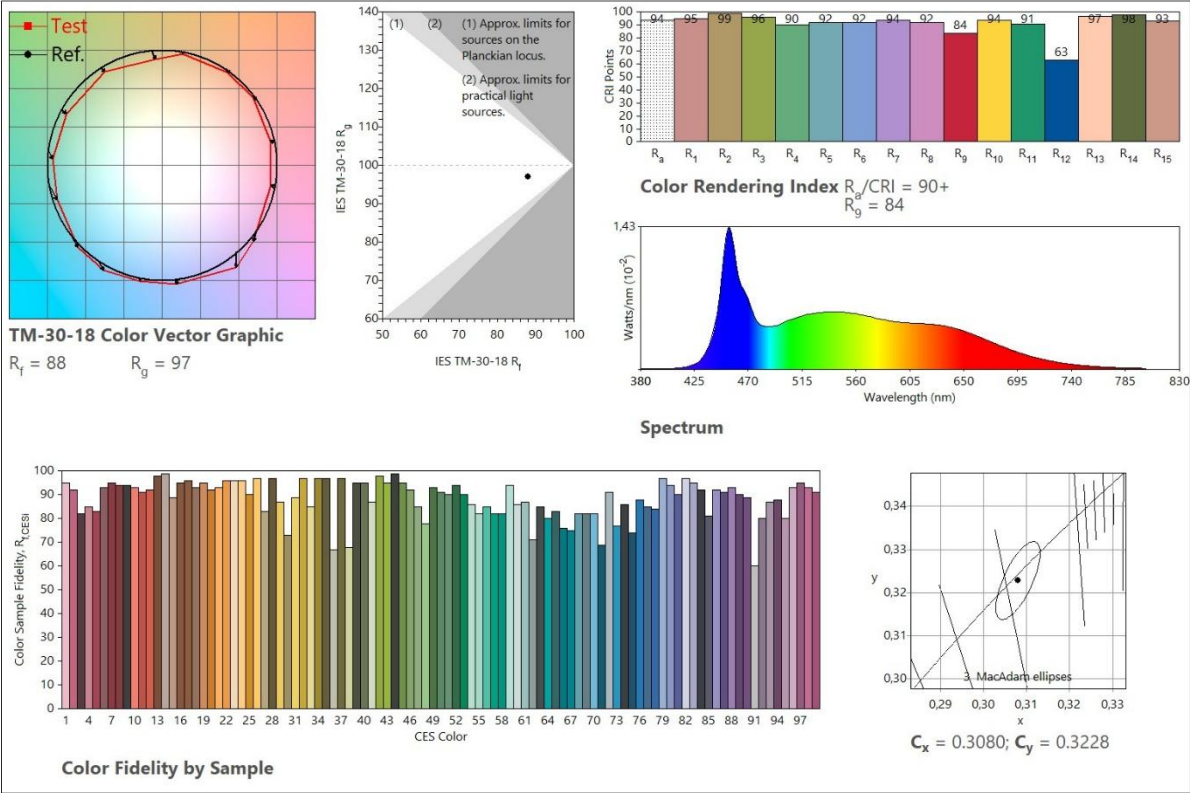
LF1300RGBW-G1-930



LF1300RGBW-G1-940

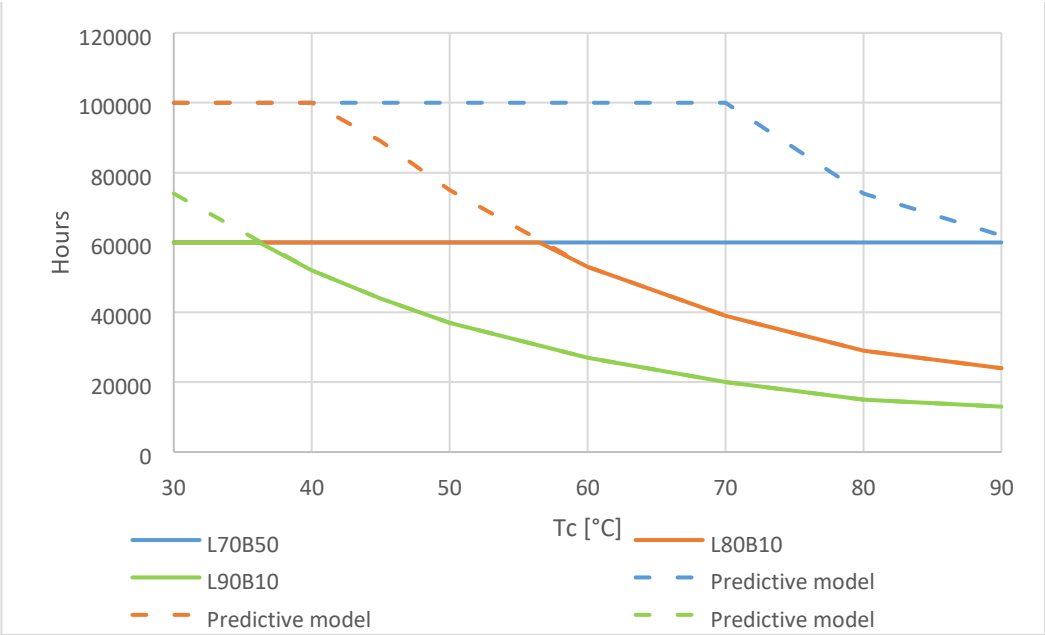


LF1300RGBW-G1-965

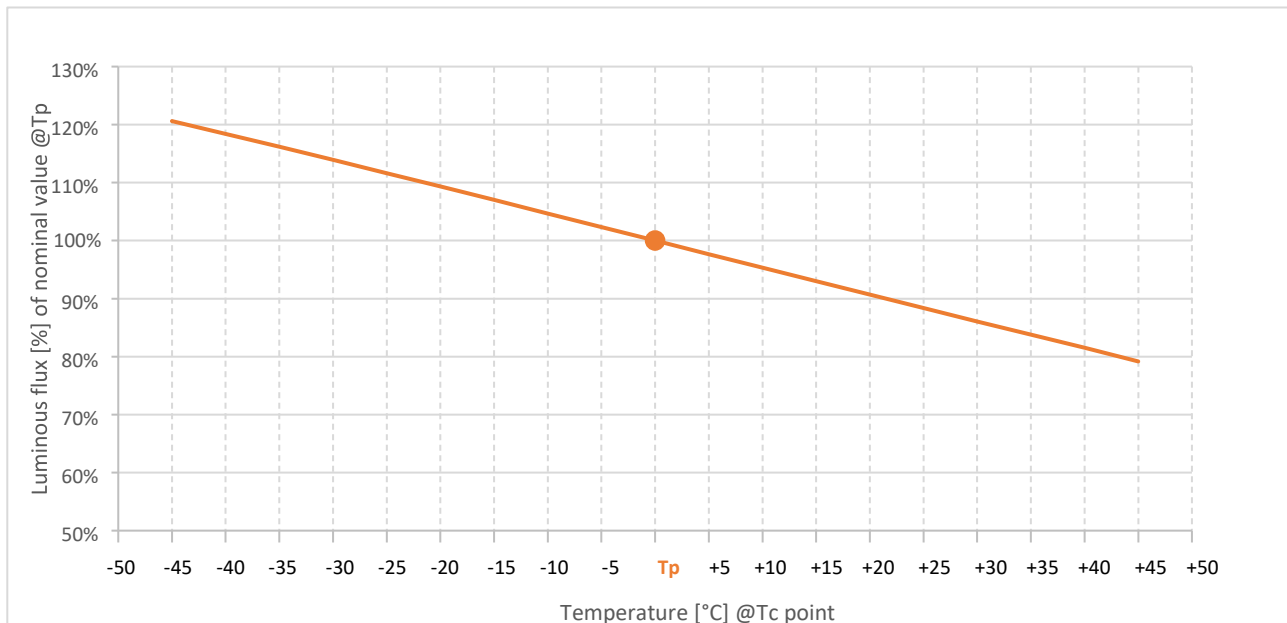


Lifetime chart

LF1300RGBW – White LED



Luminous Flux vs Tc temperature



Note: Light flux varies with the temperature measured @Tc point; nominal values is given @Tc = Tp. Flux increases when Tc decreases.

Packaging content

Product description	Product code	EAN10 Package content
LF600RGB-G5-06	6937186129567	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-922-05	6937186129628	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-927-05	6937186129642	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-930-05	6937186129666	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-940-05	6937186138514	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-965-05	6937186129680	1x LED strip pre-soldered wires both ends

Optional Accessories (only for LF600RGB -G5-06)

Product Type	Product description	Product code (EAN10)	EAN10 Package content
 2pin Connector 500mm cable	CONN-FLEX-4P-050 KIT 10PCS	6937186141163	10 x Connectors
 2pin Connector 2000mm cable	CONN-FLEX-4P-200 KIT 10PCS	6937186141187	10 x Connectors
 Bridge 30 mm cable	CORNER-FLEX-4P-003 KIT 10PCS	6937186141262	10 x Bridges
 Bridge 150 mm cable	CORNER-FLEX-4P-015 KIT 10PCS	6937186141286	10 x Bridges

Profile System

In the following tables are reported:

- **MAX TAMB:** max ambient temperature at which led module and the aluminum profile can be used without exceeding the T_{max};
- **OPTICAL PERFORMANCES - VISIBILITY OF LED SPOT:** parameter that indicates, for each aluminum profile + cover, if the LED spots are visible or if the system can provide a uniform light homogeneity along the cover emitting surface;

Legend:

LED highly visible	Faded LEDs – LED partially visible	LED NOT visible – good light uniformity

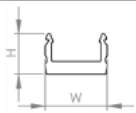
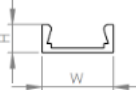
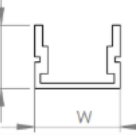
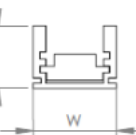
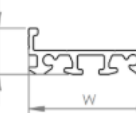
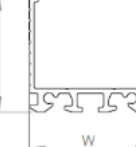
- **OPTICAL PERFORMANCES - OPTICAL EFFICIENCY:** it represents, in percentage, the amount of light lost due to the system used. If the percentage is not available, it means that the cover does not exist or cannot be used

Eg: LF600RGB-G5-06 + LTS-SLIMTRACK-2000 + cover transparent

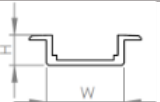
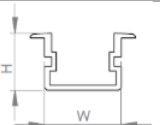
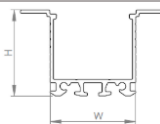
574lm/m x (-20%) = 460lm/m

460lm/m is the lumen output outside the system

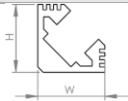
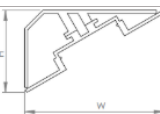
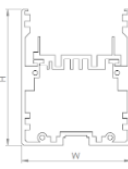
SURFACE INSTALLATION

Track Type	Dimension WxH	Product description	Max Tamb [°C]		OPTICAL PERFORMANCES (VISIBILITY of LED SPOT / OPTICAL EFFICIENCY)		
			LF600RGB	LF1300RGBW	Flat Cover Transparent	Flat Cover Frosted or Opal	Round Cover Frosted or lens
	14.5x9.5 mm	LTS-SLIMTRACK-2000 EAN:6937186141200	50°C	45°C	-20%	-35%	-40%
	15x6 mm	FX-QMS-G2-TU15H6-300 EAN:6937186130860	50°C	40°C	-15%	-40%	--
	16x12 mm	FX-QMS-G1-TU16H12-300 EAN:6937186126740	50°C	45°C	-24%	-45%	--
	16x12 mm	FX-QMS-G1-TU16H12LS-300 EAN:6937186148421	50°C	45°C	--	--	-30%
	26x10 mm	FX-QMW-G2-TU26H10-200 EAN: 6937186126849	50°C	50°C	--	--	-30%
	26x25 mm	FX-QMW-G2-TU26H25-200 EAN: 6937186126825	50°C	50°C	--	-55%	-50%

RECESSED INSTALLATION

Track Type	Dimension WxH	Product description	Max Tamb [°C]		OPTICAL PERFORMANCES (VISIBILITY of LED SPOT / OPTICAL EFFICIENCY)		
			LF600RGB	LF1300RGBW	Flat Cover Transparent	Flat Cover Frosted or Opal	Round Cover Frosted or lens
	15x6 mm	FX-QMS-G2-TU15H6W3-300 EAN:6937186126702	50°C	35°C	-15%	-40%	--
	16x12 mm	FX-QMS-G1-TU16H12W3-300 EAN:6937186146229	50°C	40°C	-24%	-45%	--
	26x25 mm	FX-QMW-G2-TU26H25W10-200 EAN: 6937186126801	50°C	50°C	--	-55%	-50%

SPECIAL INSTALLATION

Track Type	Dimension WxH	Product description	Max Tamb [°C]		OPTICAL PERFORMANCES (VISIBILITY of LED SPOT / OPTICAL EFFICIENCY)		
			LF600RGB	LF1300RGBW	Flat Cover Transparent	Flat Cover Frosted or Opal	Round Cover Frosted or lens
	19x19 mm	FX-QMS-G2-T45D19H19-300 EAN:6937186131706	50°C	45°C	-38%	-57%	--
	46 x 27 mm	FX-QMW-G1-TK30D46H27-300 EAN:6937186148407	50°C	50°C	--	-39%	-43%
	56x70 mm	FX-QMP-G1-TU56H70-xx-0yy EAN: 6977078997805 6977078997836 6977078997867 6977078997898 6977078997928 6977078997959	50°C	50°C	--	-32%	-26%
	22x110 mm	FX-QMR-G1-TT25H110-xx-0yy EAN: 6977078998017 6977078998048 6977078998079 6977078998109 6977078998130 6977078998161	50°C	50°C	--	-70%	--

LED Driver combination

All 24Vdc drivers provided by Inventronics are compatible with LINEARlight FLEX Colormix family.

Here below are available, as a suggestion, a couple of simple system combination.

For 1 x **LF1300RGBW-G1-927-05 – 95W**

Product name	Product description	EAN 10
IT FIT 120/220-240/24 + IT D0P 480/12-48V/4C NFC L C RGBW	DALI	6937186142610 + 6937186134127
IT FIT 120/220-240/24 + OT Wi DIM 5CH CA	Bluetooth – Casambi	6937186142610 + 6937186115232
IT FIT 120/220-240/24 + OT DMX DIM 5CH	DMX	6937186142610 + 6977078993838

Safety Information

The LED module itself and all its components must not be mechanically stressed.

- Assembly must not damage or destroy conducting paths on the circuit board.
- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity!
- Please ensure that the power supply is of adequate power to operate the total load.
- When mounting on metallic or otherwise conductive surfaces, there needs to be an electrical isolation at soldering points between module and the mounting surface.
- Maximum length of a coherently operable unit: 6 m (LF600RGB) and 5.1m (LF1300RGBW) with power feeder at both ends.
- Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.
- Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED Module.
- The temperature of the LED module must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.
- Pay attention to standard ESD precautions when installing and handling the module.
- Damage by corrosion will not be honoured as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.

In order to drive inventronics LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply protecting against short circuits, overload and overheating. To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards: CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384. Also check for the mark of an independent authorized certification institute.

Assembly Information

- Cutting with scissors is only possible on the marked points.
- The mounting substrate must have sufficient structural integrity.
- Maximum temperature ratings must always be kept into consideration.
- The minimum bending radius is 2 cm.
- Bending is only allowed within the bending axis of the PCB. Bending on other axes leads to torsion which may cause damage to the module and will lead to failure.

Disclaimer

Subject to change without notice. Errors and omission excepted. Make sure to use the most recent release. All values are average typical and cannot be used as reference for compliance tests.

Always refer to the official data on web site: [Inventronics flexible and area lighting](#)